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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,998	01/25/2002	Masaki Tsubokura	HITA.0154	7661

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EXAMINER

CHUNG, DAVID Y

ART UNIT PAPER NUMBER

2871

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/054,998

Applicant(s)

TSUBOKURA ET AL.

Examiner

David Y. Chung

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-- The MAILING DATE of this c mmunication appears on the cover sheet with the c rresp ndence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Pri rity under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (U.S. 6,590,626) in further view of Kim (U.S. 6,064,455).

As to claim 1, Suzuki et al. discloses a backlight for a liquid crystal display comprising a plurality of fluorescent light sources and shielding means arranged between adjacent light sources. Note in figure 1, the liquid crystal display panel 1, light guide plate 2, first and second fluorescent light pipes 3 and 4, and reflective light shielding member 5. Note in figure 2, the lower case 57 that houses the light guide plate and the fluorescent light sources. Figure 2 shows the fluorescent tube unit 55 thermally contacting the lower case 57. Therefore, housing 6 shown in figure 1 would also thermally contact the lower case 57.

Suzuki et al. does not disclose that lower case 57 in figure 2 or housing 6 in figure 1 is made of metal. Kim discloses a backlight unit comprising a silver reflector as the lamp housing and a metal press frame. Note in figure 5, reflector 240 and press

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frame 210. Kim teaches that making the lamp housing of silver and the press frame of metal results in a LCD having high resistance to heat and surface impact damage. See column 4, lines 35-62. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to make the lower case of Suzuki of metal and the housing of Suzuki of metal because of the high resistance to heat and surface impact damage.

As to claim 2, Suzuki et al. discloses a backlight for a liquid crystal display comprising a plurality of fluorescent light sources disposed on both sides of the light guide plate. See figure 3.

As to claim 3, the light shielding member of Suzuki et al. is reflective. Therefore, the surfaces of the light shielding member that face the respective light sources in an opposed manner form reflection surfaces.

Response to Arguments

Applicant's arguments filed May 3, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that neither reference teaches or suggests how to combine Suzuki's PET housing with Kim's silver reflector, or that one of ordinary skill would not be motivated to provide a metal housing having metal shielding means in view of Kim because it is technically cumbersome to roll, the test for obviousness is not

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whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). What is of particular relevance is Kim's teaching that it is desirable to make the housing structure surrounding a lamp and the frame attached to this housing structure of metal because of the high resistance to heat and surface impact damage (column 4, lines 59-62). In applying this teaching to the structure of Suzuki, one of ordinary skill in the art would have recognized that both the housing and the separators should be made of metal in order to fully realize the benefit taught by Kim and because the housing and separators are integrally formed. Furthermore, examiner sees no reason to believe that the housing of Suzuki is not in contact with the lower case frame 57.

In response to applicant's argument that the claimed invention produces unexpected results with respect to a cold cathode fluorescent tube, examiner notes that the claimed invention is not limited to displays having cold cathode tubes since this element is not recited in the claims. Applicant's argument of unexpected results is not commensurate with the scope of the claims. Therefore, the issue of unexpected results and whether or not Suzuki is aware of or concerned with the correlation between the brightness and temperature of a cold cathode fluorescent tube is not relevant to issue of obviousness as put forth in this office action. See MPEP § 716.01(b). Furthermore, because applicant has not provided any facts supporting the claim of unexpected


results on the record, either in the specification or in an affidavit, applicant's argument amounts to a mere allegation of unexpected results. See MPEP § 716.01(c).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Chung whose telephone number is (571) 272-2288. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.


ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

David Chung
GAU 2871
06/11/04